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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,571	12/07/2000	Barbara Huff	2585-006	2427

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Roberts Abokhair & Mardula, LLC
Suite 1000
11800 Sunrise Drive
Reston, VA 20191-5302

EXAMINER

TRAN, ELLEN C

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/731,571	Applicant(s) HUFF ET AL	
	Examiner Ellen C. Tran	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28 and 30-47 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 28 and 30-47 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. This action is responsive to communication: amendment filed on 26 May 2005, the original application was filed on 7 December 2000.
2. Claims 28 and 30-47 are currently pending in this application. Claims 28 and 40 are independent claims. Claims 1-27 were previously cancelled in amendment dated 27 August 2004. Claim 29 was cancelled. Claims 28, 30, 40, 44-47 were amended.

Response to Arguments

4. Applicant's arguments with respect to claims 28 and 30-47 have been considered but are not persuasive.

In response to arguments starting on pages 8-9, "To establish prima facie obviousness of a claimed invention, all the claim limitation must be taught or suggest by the prior art ... It is also well established that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification ... Further, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination". The Office disagrees the motivation to combine the two references is as stated in previous Office Action to increase the ability to provide wireless coverage see '482 col. 4, lines 1 et seq. In addition '362 indicates the use of alternative device such as a separate computer system, an AAA or RADIUS server. Furthermore '362 indicates the details of such devices are known to a persons skilled in the art, these devices would include the use of LPAD see '362 col. 7, lines 1-24.

In response applicant's argument on page 11, "Assuming that references may be combined, the combination of XU '362 and Blanco does not teach or disclose the limitation, "determining from the home region identifying information whether the home region supports Lightweight Directory Access Protocol (LDAP) authentication." Blanco describes a system by which a remote client is directed to a protocol front end via a network access server ... The client-server relationship is a one-to-one relationship". The Office disagrees in the combination of '362 and '482 the identifying information is established by RFC 2002 request message as well as the LDAP protocol in '482. See '362 col. 7, lines 1-3. The RFC 2002 request message contains information identifying the home region. The support for the LDAP protocol is shown in the attributes of the request message see '482 col. 4, lines 49-53. Also see articles referenced about the RFC 2002 as well as pertaining to the LDAP standard.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 28, 30, 31, 32, 40, 41, and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al. U.S. Patent No. 6,738,362 (hereinafter '362) in further view of Blanco et al., U.S. Patent No. 6,539,482 (hereinafter '482).

As to independent claim 28, "A method for dial roaming outside of a home service region comprising: dialing into a local dial access provider; creating an access request comprising user identifying information and home region identifying information;

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forwarding the access request from a network access server (NAS) to a corporate remote authentication dial-in user service (RADIUS) server” is taught in ‘362 col. 4, lines 14-25 “In another aspect of the invention, a mobile Internet Protocol service provider system provides access to a network for a mobile node and enables the mobile node to communicate with a host on the network”;

“proxying the access request to a regional RADIUS server associated with the user’s home region; comparing the user identifying information in the access request with user identifying information stored in a regional user database accessible to the regional RADIUS server; and if the user identifying information in the access request matches the stored user identifying information, then: authenticating the user; and providing configuration information to the NAS to allow access to a network of the home region” is shown in ‘362 col. 4, line 55 through col. 5, line 25 “In yet another aspect, a method is provided for authenticating a mobile node for network access. In accordance with the method, a registration request message is generated and sent from a foreign agent to a home registration agent. The registration request message contains information used to determine whether said mobile node is authorized to access a network, such as the mobile device's unique International Mobile Subscriber Identity (IMSI) number and/or its Electronic Serial Number (ESN). The home registration agent then determines from the information in the registration request message whether the mobile node is permitted to access the network. This step may be performed with the assistance of a authorization, authentication and accounting server, e.g., a RADIUS server. The home registration agent then generates a registration reply message and sends the registration; reply message from the home registration agent to the foreign agent” and col. 3,

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lines 41-48 “such as a general purpose computer or network access server on the visited network”;

the following is not disclosed in ‘362: **“determining from the home region identifying information whether the home region supports Lightweight Directory Access Protocol (LDAP) authentication; if the home region does not offer LDAP authentication, then”**

however ‘482 teaches in col. 4, lines 45-53 “According to the RADIUS protocol, like for other high-level protocols such as TACACS and LDAP, information is exchanged in the form of attributes. Each attribute has a unique attribute identifier and an attribute value”.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify a mobile Internet Protocol service provider taught in ‘362 to include a means to recognize the protocol used of the home service provider. One of ordinary skill in the art would have been motivated to perform such a modification to increase the ability to provide wireless Internet coverage see ‘482 (col. 4, lines 1 et seq.) “Making any authentication procedure use the directory service is however not straightforward ... they are not compatible with the protocols used for user authentication on the network, such as RADIUS and TACAS”.

As to dependent claim 30, **“wherein the NAS functions as a client of the corporate RADIUS server”** is taught in ‘362 col. 7, lines 39-60 “The wireless communication service provider may furnish all the basic elements for providing mobile IP services, ... Or, the entity may simply provide home tunneling and home registration agents, and work with other entities that own or manage the foreign agents ... Another example would be an AAA or RADIUS server”

As to dependent claim 31, “further comprising: if the home region offers LDAP authentication, then forwarding the access request to a regional LDAP database” is disclosed in ‘482 col. 3, lines 56-57 “The directory is accessible through a network client using the appropriate protocol (an LDAP client 12 in FIG. 1)”.

As to dependent claim 32, “further comprising comparing the user identifying information in the access request with user identifying information stored in a regional user- database accessible to the regional LDAP database” is shown in ‘482 col. 3, lines 58-62 “goal of the invention is to make any authentication procedure on the network use the authentication data stored in the directory. In this manner, since the same authentication data is accessible to all the authentication procedures, this authentication data in principle only needs to contain one user identifier and one password”.

As to independent claim 40, this claim is directed to the system of method claim 28 and is rejected along similar rationale.

As to dependent claim 41, this claim contains substantially similar subject matter as dependent claims 29 and 30; therefore it is rejected along the same rationale.

As to dependent claim 42, this claim contains substantially similar subject matter as dependent claim 31; therefore it is rejected along the same rationale.

7. **Claims 33-37, and 43** are rejected under 35 U.S.C. 103(a) as being unpatentable over ‘362, in further view of ‘482 in further view of Liu et al., U.S. Patent No. 5,898,780 (hereinafter ‘780).

As to dependent claim 33, the following is not taught in the combination of teachings of ‘362 and ‘482: **“further comprising the regional LDAP database sending an "accept"**

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message if the user is in the regional LDAP database and a "deny" message if the user is not in the regional LDAP database" however '780 teaches "transmits a message to the server 132 either stating that the user 144 should be granted or denied internet access" in col. 4, lines 50-65

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify a mobile Internet Protocol service provider that uses LDAP data structure taught in '362 and '482 to include a means to recognize the home service provider. One of ordinary skill in the art would have been motivated to perform such a modification to increase the ability to provide wireless Internet coverage see '780 (col. 1, lines 9 et seq.) "The apparatus of the present invention comprises a server or servers that can recognize the domain name of the home ISP".

As to dependent claim 34, "wherein the user identifying information comprises a user name and password" is disclosed in '780 col. 4, lines 50-61 "Block 162 indicates that the server 136 includes software attempts to match the "roaming" login information in an entry in a log table in the server 136".

As to dependent claim 35, "wherein the home region identifying information comprises a component of the user name" is taught in '780 col. 1, lines 25-27 "the user logs on to the local network of the foreign internet service provider using an identifier that includes the user's identification term, an identification term for the server of the home ISP".

As to dependent claim 36, "wherein the user name comprises an email address of the user" is shown in '780 col. 1, lines 31-33 "For example, the user might log o to the local

network of the local ISP by using a standard e-mail address such as jdoe@aimnet.com. Followed by the user's secret password".

As to dependent claim 37, "wherein comparing the user identifying information in the access request with user identifying information stored in a regional user database accessible to the regional RADIUS server comprises comparing the user password in the access request with a user password stored in a regional user database accessible to the regional RADIUS server" is disclosed in '780 col. 4, lines 50-61 "Block 162 indicates that the server 136 includes software attempts to match the "roaming" login information in an entry in a lob table in the server 136".

As to dependent claims 43 and 44, these claims contain substantially similar subject matter as dependent claims 33 and 34; therefore they are rejected along the same rationale.

8. **Claims 38, 39, 45, 46, and 47** are rejected under 35 U.S.C. 103(a) as being unpatentable over '362 in further view of '482, in further view of '780 and in further view of Xu et al., U.S. Patent No. 6,151,628 (hereinafter '628).

As to dependent claim 38, the following is not taught in the combination '362, 482, and '780: **"wherein the user password comprises a first hashed value and wherein comparing the user password in the access request with a user password stored in a regional user database accessible to the regional RADIUS server comprises: determining at the regional RADIUS server a hashing algorithm used to create the first hashed value; obtaining the stored password in clear text format; applying the hashing algorithm to the clear text stored password to produce a second hashed value; and comparing the first hashed value to the second hash value"** however '628 teaches "In a preferred network access embodiment of

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the invention, a second phase authentication routine is employed to verify that the remote user is authorized to access the designated network. This is accomplished by conducting a password authentication procedure such PAP or CHAP routine both of which are known in the art” in col. 9, lines 48-57.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify a mobile Internet Protocol service provider which uses a LDAP data structure with ability to recognize ISP provider taught in the combination of ‘362, ‘482, and ‘780 to include a means provide additional security. One of ordinary skill in the art would have been motivated to perform such a modification to increase the ability of Internet service providers to serve many users see ‘628 (col. 2, lines 1 et seq.) “The present invention also provides for network access methods by which a network access server, in combination with one or more authentication servers, can provide Internet and corporate network authentication and access”.

As to dependent claim 39, “wherein the hashing algorithm is CHAP” is taught in ‘628 col. 9, lines 48-57.

As to dependent claim 45, 46, and 47, these claims contain substantially similar subject matter as dependent claims 38 and 39; therefore they are rejected along the same rationale.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant’s disclosure.

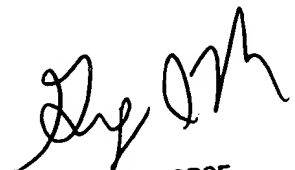
RFC 2002, Network Working Group	October 1996
Open mobility management platform...	2-3 April 1998
Service trading for mobile agents with LDAP...	17-19 June 1998

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is (571) 272-3842. The examiner can normally be reached from 6:00 am to 1:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ellen Tran
Patent Examiner
Technology Center 2134
19 August 2005



GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100